



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,904	12/10/2004	Jianhua Feng	FM-10-US	4693
50446 7590 03/05/2009 HOXIE & ASSOCIATES LLC 75 MAIN STREET, SUITE 301 MILLBURN, NJ 07041				
EXAMINER				
MACAULEY, SHERIDAN R				
ART UNIT		PAPER NUMBER		
1651				
MAIL DATE		DELIVERY MODE		
03/05/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/517,904

**Applicant(s)**

FENG ET AL.

**Examiner**

SHERIDAN R. MACAULEY

**Art Unit**

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 3-5, 7, 8 and 10-23 is/are pending in the application.  
4a) Of the above claim(s) 10-23 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1, 3-5, 7 and 8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 10 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/9/08, 12/9/08.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

A response and amendment were received and entered on December 9, 2008. All evidence and arguments have been fully considered. Claims 1, 3-5, 7, 8 and 10-23 are pending. Claims 10-23 are withdrawn due to a prior requirement for restriction. Claims 1, 3-5, 7 and 8 are examined on the merits in this office action.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 9, 2008 has been entered.

### ***Claim Objections***

Claim 5 is objected to because of the following informalities. It is recommended that the claim be amended as follows: The words "A" or "The" should be inserted at the beginning of the claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1651

2. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. The phrase "has measurable PKB Ser 473 kinase activity in 0.2 micrograms of protein when detected in a kinase assay in which a PKB peptide is phosphorylated with <sup>32</sup>P labeled phosphate" in claim 7 renders the claims indefinite because "measurable" is a relative term. The term is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The amount of activity that may be measurable would vary depending on the technique that is used and thus one of ordinary skill in the art would not be apprised of the metes and bounds of the claimed invention.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by Brown (US 6,322,962), Joly et. al (US 6,342,495) or Cravatt et al. (US 2002/0040275) as evidenced by Toker et al. (J. Biol. Chem., 2000, 275:8271-4; cited in prior action).

Claim 1 recites a cell-free composition comprising a complex which has a PKB Ser 473 kinase activity and an apparent molecular weight of 450-650 kDa. Claims 3 and 4 recite the composition of claim 1, wherein said complex comprises a protein having a molecular weight of 48 kDa and a protein having a molecular weight of 58 kDa as estimated by SDS gel electrophoresis. Claim 5 recites a purified PKB Ser 473 kinase protein complex, has PKB Ser 473 kinase activity and an apparent molecular weight of 450-650 kDa when fractionated by gel filtration chromatography. Claim 7 recites a purified cell extract that has measurable PKB Ser 473 kinase activity in 0.2 micrograms of protein when detected in a kinase assay in which a PKB peptide substrate is phosphorylated with  $^{32}\text{P}$  labelled phosphate, wherein the kinase elutes with an apparent molecular weight of 450-650 kDa when fractionated by gel filtration chromatography. Claim 8 recites the purified cell extract of claim 7, wherein the kinase elutes with an apparent molecular weight of 550 kDa when fractionated by gel filtration chromatography.

6. Brown (col. 9, lines 58-64), Joly (col. 13, lines 12-19) and Cravatt (p. 20, par 182) each teach compositions comprising the membrane fraction of HEK 293 cells. The membrane preparations of the references are purified (i.e. they have been separated from other cellular components) and inherently cell-free. As evidenced by Toker, the HEK 293 cells would inherently possess PKB Ser 473 kinase activity (abstract, p. 8273, par. 3, fig. 3). Because these preparations are prepared in the same way as those disclosed in the instant application, e.g., the HEK 293 cells are lysed and the membrane fraction as been prepared (see, for example, p. 12, par. 2-4 or the instant specification),

they would inherently comprise a complex with the claimed activity and molecular weight and comprise the proteins with the claimed molecular weights.

7. The claimed functions, characteristics, and/or traits must be inherent to the reference composition. The discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art's functioning, does not render the old composition patentably new. Thus the claiming of a new use, functions or unknown property that is inherently present in the prior art does not necessarily make the claim patentable (See MPEP 2112).
8. Therefore, the cited references anticipate all of the limitations of the claims.

### ***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHERIDAN R. MACAULEY whose telephone number is (571)270-3056. The examiner can normally be reached on Mon-Thurs, 7:30AM-5:00PM EST, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone

Art Unit: 1651

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SRM

/Ruth A. Davis/  
Primary Examiner, Art Unit 1651